

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A dimethyl ether steam reforming catalyst capable of steam-reforming dimethyl ether to obtain hydrogen, comprising active alumina, Cu, and at least one element selected from the group consisting of Mn and Fe, the catalyst ~~being prepared by a sol-gel method, and the catalyst~~ having a porous structure, wherein an amount of pores having pore diameters of 80 Å to 200 Å occupy a largest volume in said porous structure and wherein the volume of pores having pore diameters of 80 Å to 200 Å is 35 percent or more based on total pore volume.

2. (Original) The dimethyl ether steam reforming catalyst according to Claim 1, wherein the total content of said Cu and said at least one element is 25 wt% to 35 wt%.

3. (Currently Amended) A dimethyl ether steam reforming catalyst capable of steam-reforming dimethyl ether to obtain hydrogen, comprising active alumina, Cu, and at least one element selected from the group consisting of Mn, Fe and Zn, ~~the catalyst being prepared by a sol-gel method, and the catalyst~~ having a porous structure, wherein the total content of said Cu and said at least one element is 25 wt% to 35 wt%, wherein an amount of pores having pore diameters of 80 Å to 200 Å occupy a largest volume in said porous structure and wherein the volume of pores having pore diameters of 80 Å to 200 Å is 35 percent or more based on total pore volume.

4. (Original) The dimethyl ether steam reforming catalyst according to Claim 1 or 3, wherein said at least one element contains 0.1 wt% to 1.0 wt% of Mn.

5. (Original) The dimethyl ether steam reforming catalyst according to Claim 1 or 3, wherein said at least one element contains 0.5 wt% to 2.0 wt% of Fe.

6. (Original) The dimethyl ether steam reforming catalyst according to Claim 3, wherein said at least one element contains 0.1 wt% to 7.0 wt% of Zn.

7. (Canceled).

8. (Original) A method for producing a dimethyl ether steam reforming catalyst capable of steam-reforming dimethyl ether to obtain hydrogen, comprising the steps of:

adding an acid, a Cu salt and at least one salt selected from the group consisting of Mn salts, Fe salts and Zn salts to an aluminum alkoxide to produce a sol;

drying the resulting sol by evaporation to produce a gel;

calcinating the resulting gel to obtain a solid; and

reducing the resulting solid.